

FINAL EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING AMENDMENTS TO THE 2010 CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, CHAPTER 11A ONLY
(HCD 02/10)

The Department of Housing and Community Development (HCD) proposes to make necessary changes to the 2010 edition of the California Building Code (CBC), Chapter 11A – Housing Accessibility, as presented on the following pages.

LEGEND FOR EXPRESS TERMS:

1. Existing California amendments or code language being modified: *All such language shown in italics Arial 9 point; modified language is underlined or shown in ~~strikeout~~.*
 2. Repealed text: *All such language shown in ~~strikeout~~.*
 3. Amended, adopted or repealed language after public hearing: *All such language shown in double underline or ~~double-strikeout~~.*
 4. Notation: Authority and Reference citations are provided at the end of each section.
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1. HCD proposes to amend Section 1010.9 as follows:

1010.9 Edge protection. *Edge protection complying with Section 1010.9.1 or 1010.9.2 shall be provided on each side of ramp runs and at each side of ramp landings. ~~[HCD 1-AC] See Chapter 11A, Sections 1114A.7 and 1122A.6, for curb and wheel guide requirements.~~*

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

2. HCD proposes to amend Section 1107A.3-C as follows:

**SECTION 1107A
DEFINITIONS**

1107A.3-C

CARRIAGE UNIT *is a dwelling unit with living space on one or more floors immediately above a Group U, ~~Division 4,~~ private garage or garages. The footprint of the garage or garages is used as the footprint for the remaining floor or floors of the units above and the garage level contains no habitable space.*

Note: *Dwelling units located over a common garage shall not be considered carriage units.*

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690,

18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

3. HCD proposes to amend Section 1113A.1 as follows:

SECTION 1113A WALKS AND SIDEWALKS ON AN ACCESSIBLE ROUTE

1113A.1 Width and continuous surface. Walks and sidewalks subject to this chapter shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2 inch (12.7 mm). (See Section 1111A.3.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

4. HCD proposes to amend Section 1114A.7 as follows:

1114A.7 Curbs and wheel guides. Ramps exceeding 10 feet (3048 mm) in length and ramp landings having a vertical drop exceeding 4 inches (101.6 mm), shall be provided with one of the following:

1. Guide curbs a minimum of 2 inches (50.8 mm) in height at each side; or
2. Wheel guide rails at each side, centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the ramp or ramp landing.

Exception: Ramps or ramp landings bounded by a wall or fence.

Note: See Figure 11A-5A.

1114A.7 Edge protection. Ramps and ramp landings shall be provided with a continuous and uninterrupted barrier on each side along the entire length in compliance with Sections 1010.9 and 1010.9.1. (See Figure 11A-5A.)

Note: Extended floors or ground surfaces, as permitted in Section 1010.9.2, are not allowed for ramps and ramp landings part of an accessible route.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

5. HCD proposes to amend Sections 1116A.2 and 1116A.3 as follows:

SECTION 1116A HAZARDS ON ACCESSIBLE ROUTES

1116A.1 – No Changes

1116A.2 Headroom clearance. Walks, pedestrian ways and other circulation spaces, which are part of the required egress system, shall have a minimum clear headroom of 84 inches (2134 mm). Other walks, pedestrian ways and circulation spaces shall have a minimum clear headroom of 80 inches (2032 mm). If the vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches (2032 mm) nominal dimension, a guardrail or other barrier having its leading edge at or below 27 inches (686 mm) above the finished floor shall be provided. ~~(See Figure 11A-1B.)~~

Exception: Doorways and archways less than 24 inches (610 mm) in depth may have a minimum clear headroom of 80 inches (2032 mm) nominal. (See Section 1126A.)

1116A.3 Overhanging obstructions. Any obstruction that overhangs a pedestrian way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. ~~(See Figure 11A-1B.)~~ Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction (see Section 1116A.2 for required headroom clearance).

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

6. HCD proposes to amend Section 1122A.6 as follows:

~~1122A.6 Curbs and wheel guides.~~ ~~Ramps exceeding 10 feet (3048 mm) in length and ramp landings having a vertical drop exceeding 4 inches (101.6 mm), shall be provided with one of the following:~~

- ~~1. Guide curbs a minimum of 2 inches (50.8 mm) in height at each side; or~~
- ~~2. Wheel guide rails at each side, centered 2 to 4 inches (50.8 to 101.6 mm) above the surface of the ramp or ramp landing.~~

~~Exception:~~ ~~Ramps or ramp landings bounded by a wall or fence.~~

~~Note:~~ ~~See Figure 11A-5A.~~

1122A.6 Edge protection. Ramps and ramp landings shall be provided with a continuous and uninterrupted barrier on each side along the entire length in compliance with Sections 1010.9 and 1010.9.1. (See Figure 11A-5A.)

Note: Extended floors or ground surfaces, as permitted in Section 1010.9.2, are not allowed for ramps and ramp landings providing access to, or egress from, buildings or facilities where accessibility is required.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

7. HCD proposes to amend Section 1124A.3.4 as follows:

SECTION 1124A ELEVATORS AND PLATFORM (WHEELCHAIR) LIFTS

1124A.3 Size of cab and control locations.

1124A.3.1 – No Changes

1124A.3.2 – No Changes

1124A.3.3 – No Changes

1124A.3.4 Emergency telephone. *The emergency telephone handset shall be positioned no higher than 48 inches (1219 mm) above the floor, and the handset cord shall be a minimum of 29 inches (737 mm) in length. If the telephone system is located in a closed compartment, the compartment door hardware shall be a lever-type conforming to the provisions of Section 1126A.6.4 1127A.9.6.4. Emergency intercommunication shall not require voice communication.*

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

8. HCD proposes to amend Section 1124A.8 as follows:

1124A.8 Doorjamb marking. *All elevator hoistway entrances shall have raised floor number designations provided on both jambs. Characters shall be raised Arabic numerals a minimum of 2 inches (50.8 mm) in height with raised Braille symbols placed below the corresponding raised characters. The raised characters shall be on a contrasting background with the centerline of the characters 60 inches (1524 mm) from the floor. Braille symbols shall conform to Sections 1117B.5.5 and 1117B.5.6.*

On the grade level, a raised five-pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches (50.8 mm). Braille shall be placed below the corresponding raised characters (see Figure 11A-7C).

1124A.8 Doorjamb marking. *The floor level at all elevator hoistway entrances shall be designated by raised characters provided on both jambs. Characters shall be 2 inches (50.8 mm) in height located with the centerline 60 inches (1524 mm) from the floor. On the main entry level, a raised five-pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches (50.8 mm) and all points shall be of equal length. The raised characters and the star shall be white on a black background. Contracted Grade 2 Braille, conforming to Section 1143A.9, shall be placed below the corresponding raised characters and the star. The Braille translation for the star shall state "MAIN". The raised characters shall comply with Section 1143A.8. (See Figure 11A-7C.)*

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

9. HCD proposes to amend Section 1124A.9 as follows:

1124A.9 Door protective and reopening devices. Doors closed by automatic means shall be provided with a door-reopening device that will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing.

This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact for activation at a nominal 5 inches and 29 inches (127 mm and 737 mm) above the floor.

Door-reopening devices shall remain effective for a period of not less than 20 seconds. After such an interval, the doors may close in accordance with the requirements of ~~ANSI 17.1-86 and the American Society of Mechanical Engineers (ASME) document ASME 17.1-1990.~~ ASME A17.1

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

10. HCD proposes to amend Section 1124A.11.1 and adopt Sections 1124A.11.2, 1124A.11.3, 1124A.11.4, 1124A.11.5 and 1124A.11.6 as follows:

1124A.11 Platform (wheelchair) lifts.

1124A.11.1 General. Platform (wheelchair) lifts may be provided between levels, in lieu of passenger elevators, when the vertical distance between landings, as well as the structural design and safeguards are as allowed by ASME A18.1, "Safety Standard for Platform Lifts and Stairway Chair Lifts"; the State of California, the Department of Industrial Relations, Division of Occupational Safety and Health (Title 8 "Elevator Safety Orders") and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift, and shall comply with restrictions and enhancements of this section in conjunction with Title 8 of the California Code of Regulations.

1124A.11.2 Size and clear floor space. Platform (wheelchair) lifts shall be of sufficient size to accommodate a wheelchair in accordance with Section 1127A.9.4.

1124A.11.3 Lift access. There shall be a level and clear floor area or landing at each floor or level served by platform (wheelchair) lifts. Clear floor areas or landings shall meet the applicable "accessible route" requirements.

1124A.11.4 Standby power. To ensure continued operation in case of primary power loss, platform (wheelchair) lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five upward and downward trips.

1124A.11.5 Openness. Platform (wheelchair) lifts on an accessible means of egress shall not be installed in a fully enclosed hoistway.

1124A.11.6 Doors and gates. Lifts shall have low energy power-operated doors or gates, which shall remain open for 20 seconds minimum. End doors shall have 32 inches (813 mm) minimum clear opening width. Side doors clear opening width shall be 42 inches (1067 mm) minimum.

Exception: Lifts having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.

1124A.11.7 Restriction sign. A sign complying with Sections 1143A.3 and 1143A.4 shall be securely fastened in a conspicuous place at each landing and on the platform. The sign shall state "No Freight" in letters not less than 5/8 inch (16 mm) high and include the International Symbol of Accessibility.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

11. HCD proposes to amend Sections 1125A.2 and 1125A.3 as follows:

**SECTION 1125A
HAZARDS ON ACCESSIBLE ROUTES**

1125A.1 – No Changes

1125A.2 Headroom clearance. *Walks, halls, corridors, passageways, aisles, pedestrian ways and other circulation spaces, which are part of the required egress system, shall have a minimum clear headroom of 84 inches (2134 mm). Other walks, pedestrian ways and circulation spaces shall have a minimum clear headroom of 80 inches (2032 mm). If the vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches (2032 mm) nominal dimension, a guardrail or other barrier having its leading edge at or below 27 inches (686 mm) above the finished floor shall be provided. (See Figure 11A-1B).*

Exception: *Doorways and archways less than 24 inches (610 mm) in depth may have a minimum clear headroom of 80 inches (2032 mm) nominal. (See Section 1126A.)*

1125A.3 Overhanging obstructions. *Any obstruction that overhangs a pedestrian way shall be a minimum of 80 inches (2032 mm) above the walking surface as measured from the bottom of the obstruction. (See Figure 11A-1B.) Where a guy support is used parallel to a path of travel, including, but not limited to, sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction (see Section 1125A.2 for required headroom clearance).*

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

12. HCD proposes to amend Section 1127A.2.4 as follows:

SECTION 1127A COMMON USE FACILITIES

1127A.2 Toilet facilities

1127A.2.1 – No Changes

1127A.2.2 – No Changes

1127A.2.3 – No Changes

1127A.2.4 Accessible urinals. Urinals required to be accessible shall comply with the following:

1. **Height and wall projection.** Urinals shall be floor mounted or wall hung. Where one or more wall-hung urinals are provided, at least one with a rim projecting a minimum of 14 inches (356 mm) to a maximum of 17 inches (432 mm) from the wall and a maximum of 17 inches (432 mm) above the floor shall be provided.

2. **Flush controls.** Flush controls shall be operable with one hand, shall not require tight grasping, pinching or twisting of the wrist and shall be mounted no more than 44 inches (1118 mm) above the floor. The force required to activate controls shall be no greater than 5 pound-force (lbf) (22.2 N). Electronic automatic flushing controls are acceptable and preferable.

3. **Clear floor space and reach ranges.** Where urinals are provided, at least one shall have a clear floor space 30 inches by 48 inches (762 mm by 1219 mm) in front of the urinal to allow forward approach. ~~This eClear floor space and reach ranges shall comply with Sections 1127A.9.4 and 1127A.9.5~~ ~~1127A.5.~~

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

13. HCD proposes to amend Section 1127A.7.2 as follows:

1127A.7 Signs

1127A.7.1 – No Changes

1127A.7.2 Identification symbols. Doorways leading to sanitary facilities shall be identified by a geometric symbol in compliance with this section. Geometric symbols shall be centered horizontally on the door at a height of 60 inches (1524 mm) above the finish floor or ground surface measured to the center of the symbol. Edges of accessibility signage shall be rounded, chamfered or eased. Corners shall have a minimum radius of 1/8 inch (3.2 mm). See Section 1143A.10, ~~Item 1,~~ for additional signage requirements applicable to sanitary facilities.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

14. HCD proposes to amend Division VII – FIGURES as follows:

FIGURE 11A-1B – OVERHANGING OBSTRUCTION

Amend title to read "Headroom Clearance and Overhanging Obstruction".
Correct the dimension of "Overhanging Obstruction": Delete 84" and replace with 80".
Add dimension (84") for "Headroom Clearance".
Indicate the location of measurements for "Overhanging Obstruction" and "Headroom Clearance".

FIGURE 11A-1H – MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS

Delete "24" or more" and replace with "greater than 24".

FIGURE 11A-5A – RAMPS AND SIDEWALKS

Diagram (b):

Amend title to read "Handrail and Guide Rail";
Indicate location of handrail and guide rail;
On the Guide Rail Detail, delete Guide Rail centered at $3" \pm 1"$ and replace with $<4"$.

Diagram (c):

Amend title to read "Guide Curb";
Delete "& Curb" below "Handrail" on both sides of wheelchair;
Delete $3" \pm 1"$ and replace with 4" min.;
Delete "Wheel Guide" and replace with "Guide Curb";
Delete "Wheel Guide Detail" and replace with "Guide Curb Detail".

FIGURE 11A-6C – RAMP DIMENSIONS

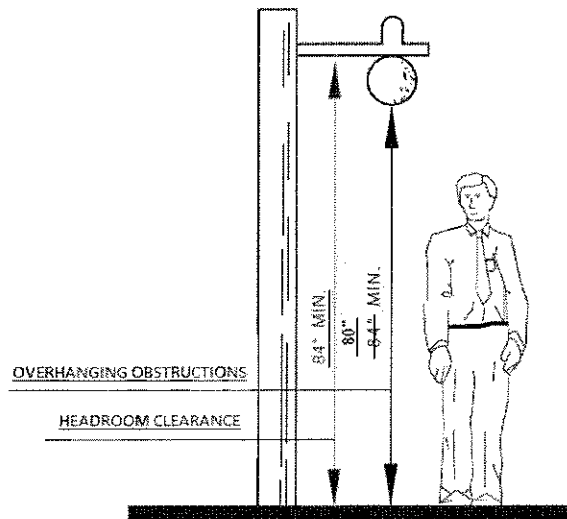
Delete "platform" and replace with "landing".

FIGURE 11A-6D – RAMP LANDING AND DOORWAY

Delete "platform" and replace with "landing".

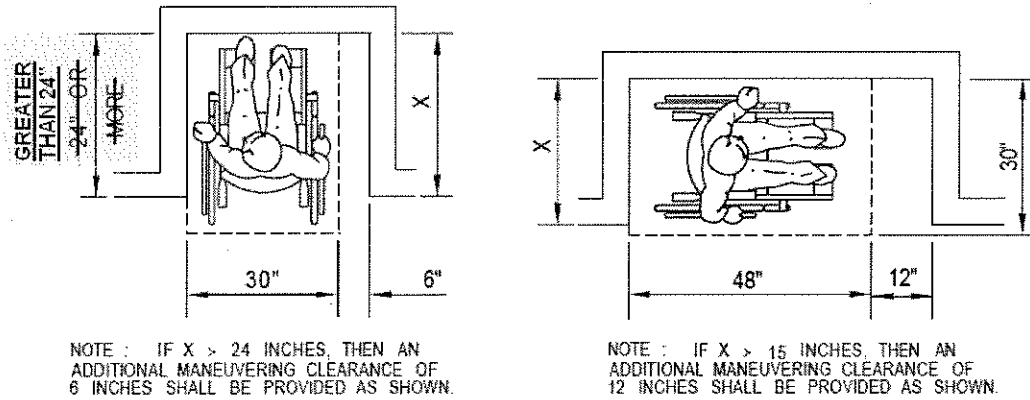
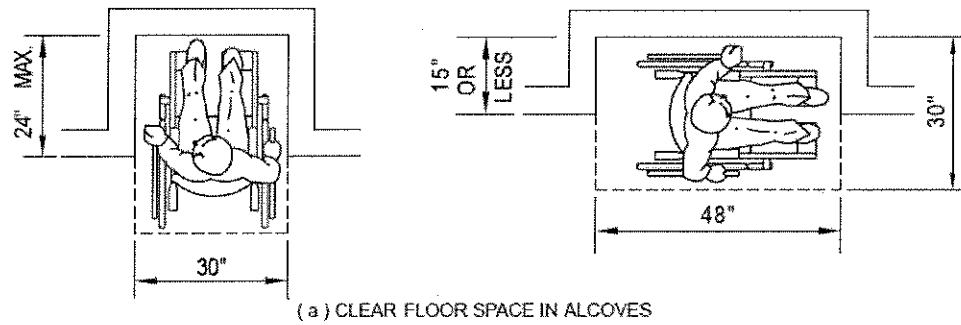
FIGURE 11A-7C – HOISTWAY AND ELEVATOR ENTRANCES

Include enlarged diagram of the floor designation sign.



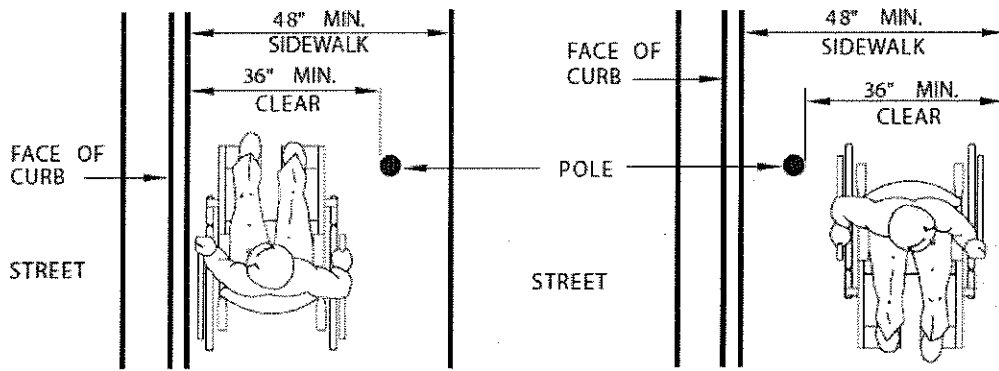
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-1B— HEADROOM CLEARANCE AND OVERHANGING OBSTRUCTION

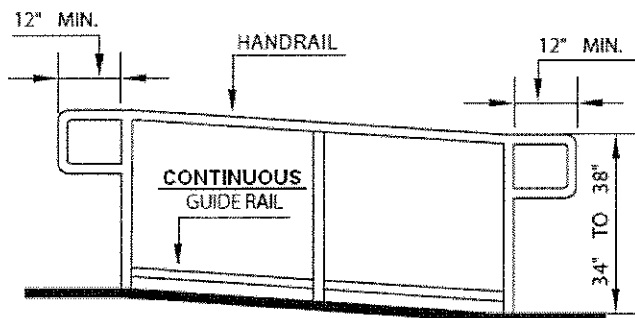


THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

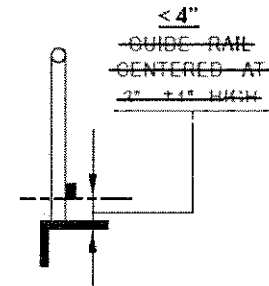
FIGURE 11A-1H—MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS



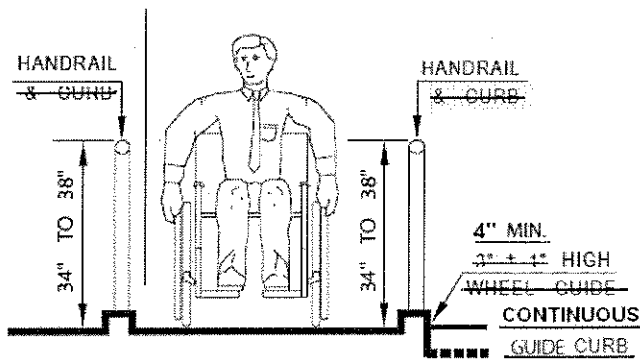
(a) SIDEWALK OBSTRUCTIONS



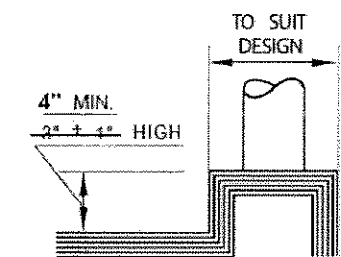
(b) HANDRAIL AND GUIDERAIL



GUIDE RAIL DETAIL



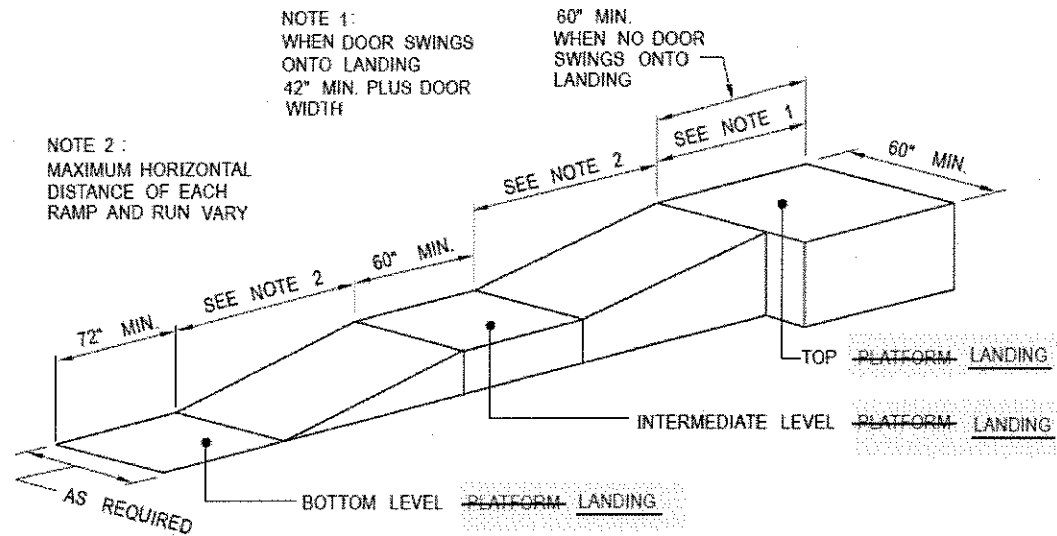
(c) WHEEL GUIDE CURB



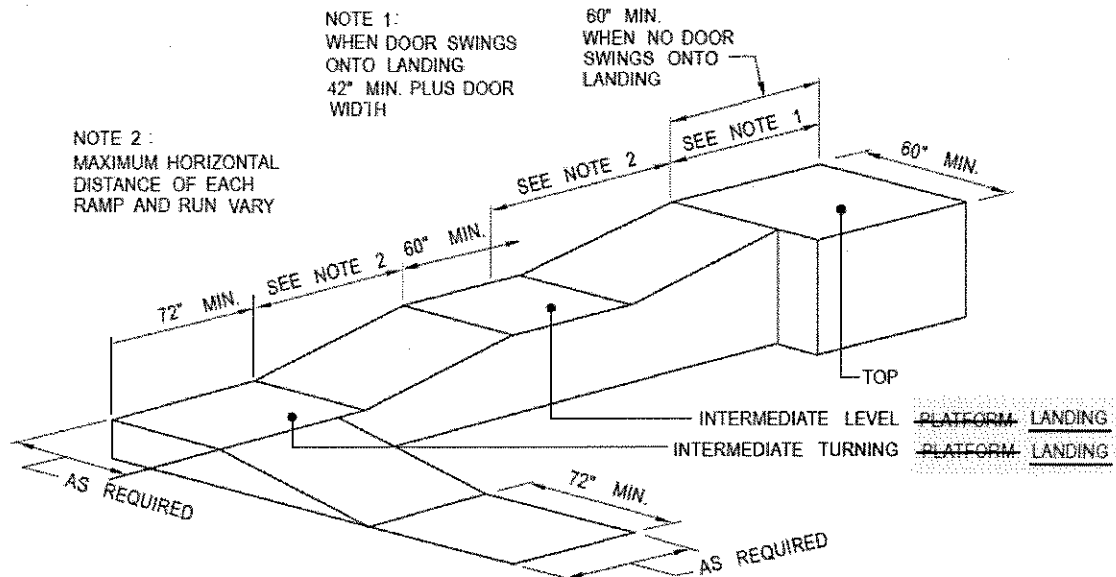
WHEEL GUIDE CURB DETAIL

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-5A—RAMPS AND SIDEWALKS



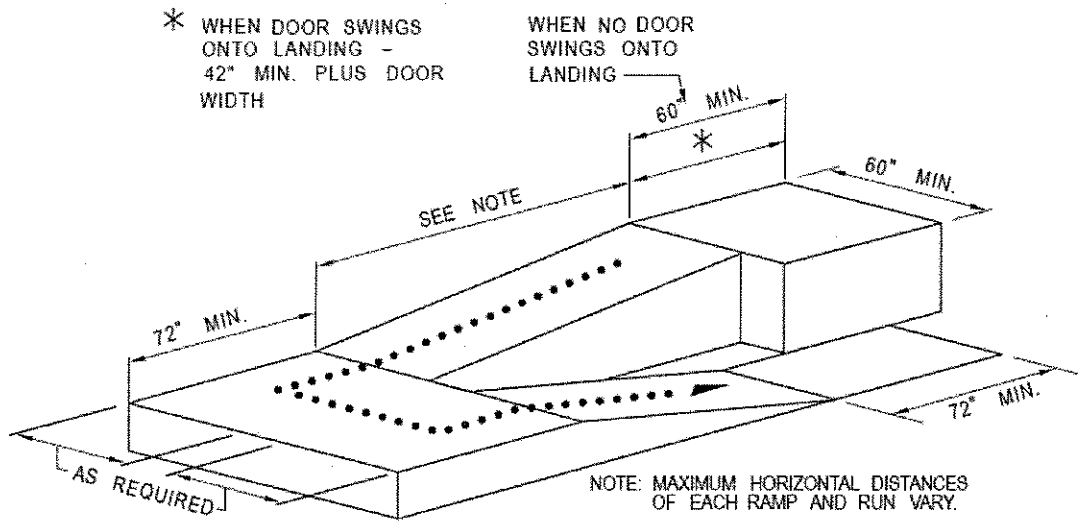
(a) STRAIGHT RAMP RUN



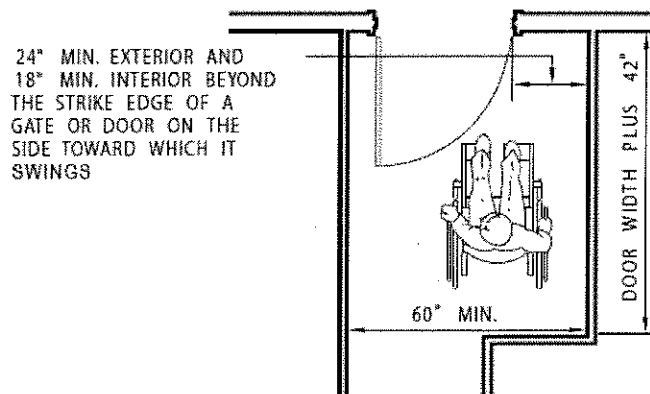
(b) RAMP WITH TURNING

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-6C—RAMP DIMENSIONS



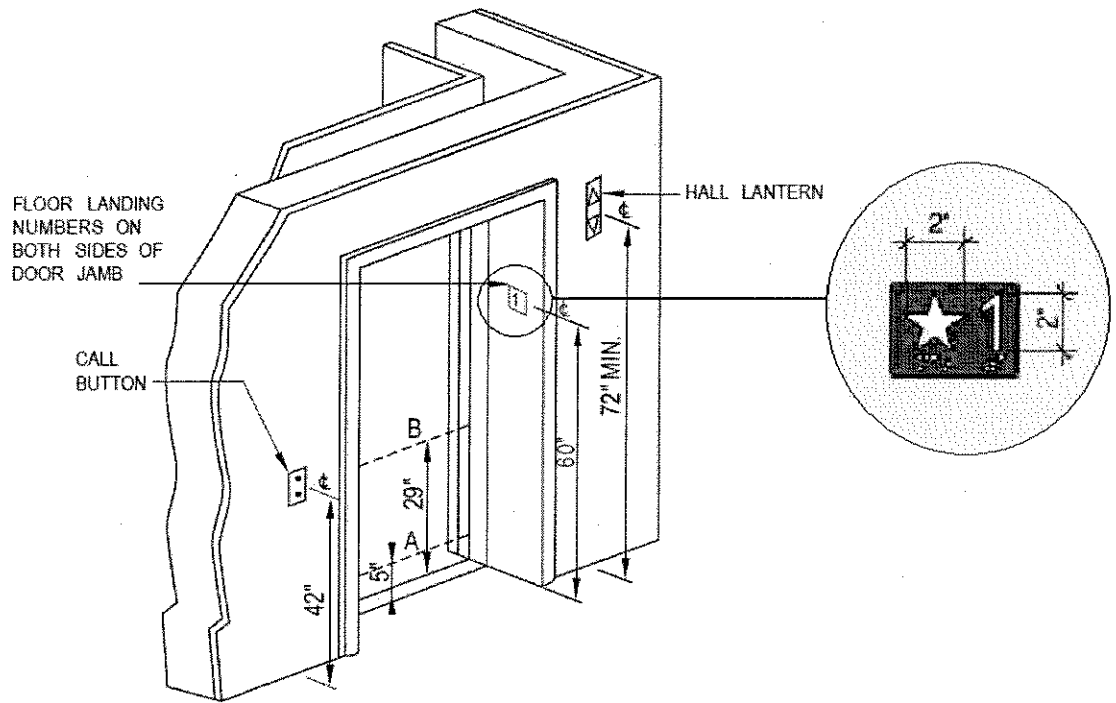
(a) RAMP WITH INTERMEDIATE SWITCH BACK PLATFORM LANDING



(b) RAMP LANDING AT DOORWAY

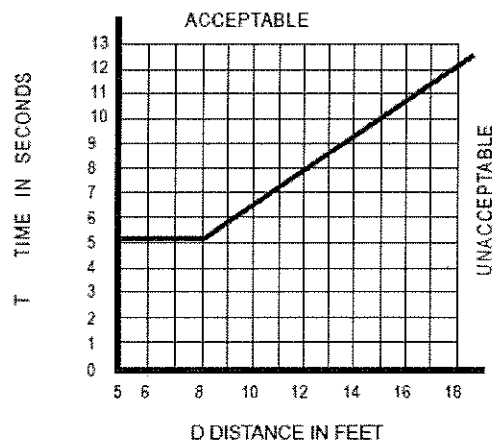
THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-6D—RAMP LANDING AND DOORWAY



NOTE:
THE AUTOMATIC DOOR REOPENING DEVICE IS ACTIVATED IF AN OBJECT PASSES THROUGH EITHER LINE A OR LINE B. LINE A AND LINE B REPRESENT THE VERTICAL LOCATION OF THE DOOR REOPENING DEVICE NOT REQUIRING CONTACT.

FIGURE 11A-7C—HOISTWAY AND ELEVATOR ENTRANCES



THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11A-7D—GRAPH OF TIMING EQUATION